

To understand the future of *cybersecurity* this essay aims to provide a discussion of the potential risks and limitations of incorporating *Artificial Intelligence* (AI) into existing systems. The integration of (AI) into *cybersecurity* may have both positive and unintentional consequences by creating new challenges and vulnerabilities that require human expertise; What impact will (AI) have on human involvement with *cybersecurity* systems? This argument directly affects the field of cybersecurity as well as my course study while pursuing a BS in the computer sciences with a concentration in *cybersecurity*. (AI) can vastly help with reducing the time it takes to identify risks and security threats, it can process large amounts of datasets increasing response times while learning. The negative aspect to (AI) involvement with *cybersecurity* systems is that hackers and cyber terrorists can now use the same (AI) tools to install vicious malware and ransomware with absolutely no human interaction.

Potential challenges I may encounter in supporting my argument with my audience is that ultimately (AI) is in both extremes *good* and *bad* for 'business'. My initial audience will be those interested or involved with *theoretical technologies*, the *computer sciences* or *cybersecurity*. The Challenges of supporting my argument with this audience is that (AI) is a controversial subject and has since warranted governmental regulation. The future of (AI) in both public and private sectors will be monitored while the government is exempt from its own regulation policy. One of my goals is to prove (AI) is completely necessary regardless of its risks. In an attempt to successfully meet my goal I will use the aid of an (AI) tool to garner its response to my working thesis:

“The integration of Artificial Intelligence (AI) into *cybersecurity* may have both positive and unintentional consequences by creating new challenges and vulnerabilities that require human expertise; What impact will (AI) have on human involvement with *cybersecurity* systems?”

Three key points I may consider to support my argument will ask if (AI) can assist *cybersecurity* systems by:

- Staying ahead of cyber threats.////
- Accessing various extensive datasets.////
- Drastically reducing response times to security risks.////

Among the sources which I have gathered through research, several are from credible databases such as IBM.com, weforum.org and an Executive order concerning (AI) regulation.

IBM or International business machine has been providing technical assistance and innovation since 1911 and is considered a staple within the industry. The source I will be citing was developed by the Chief Technology Officer (CTO) for IBM security on the solution (AI) can provide in *cybersecurity* titled: "Artificial intelligence (AI) for cybersecurity." The research provided by a corporation that has set the groundwork for technological trends the better part of a century is tantamount as its validity is *international* afterall.

I will also attribute findings from the World Economic Forum (WEF) database or [weforum.com](http://weforum.com); established in 1971 as an impartial "not-for-profit foundation," to bring both global public and private sectors balance through entrepreneurial accountability. In the EMERGING TECHNOLOGIES category on the WEF website, *Julia Bossmann* who holds a MSc in both *psychology* and *neuroscience* authors, "Top 9 ethical issues in artificial intelligence," and provides an impartial view on these critical applications. I aim to use the *ethos* of her work to provide a clearer understanding on how (AI) can be misused in current *cybersecurity* models.

Lastly, I will attribute United States Executive Order 13859, per the National Artificial Intelligence Initiative (NAII) or [ai.gov](http://ai.gov) concerning the, "Guidance for Regulation of Artificial Intelligence Applications," M-21-06 authored by Director Russell T. Vought titled: "Maintaining American Leadership in Artificial Intelligence," to establish the severe implications of (AI) regulation and to demonstrate how, "(AI) is outside the scope of this Memorandum." -US Federal government.

By following the established writing plan from 2-5 ENG comp II coursework with my provided notes and proper citations I plan on creating a body of work to present the possible threats and advantages of (AI) in current *cybersecurity* systems. I understand that my audience will be highly educated with advanced degrees and I will use as much supporting evidence that I can facilitate.////

As always I will continue to develop and research my thesis in the matter and consider the integration of (AI) in *cybersecurity* may have both positive and unintentional consequences by creating new challenges and vulnerabilities that require human expertise; What impact will (AI) have on human involvement with *cybersecurity* systems?

Good luck with your continued research and cheers.